

JB-23, 24 Type Bellows Expansion Joint

for Building · Air Conditioning Equipments, Factory Equipments etc.

For high pressure application Max. 2.0MPa

Double-layer Bellows

Corrosion resistant, durable Stainless steel bellows expansion joint, suitable for pressure up to 2.0MPa. The face-to-face dimensions are the same as those for JIS certified JB-21, 22.



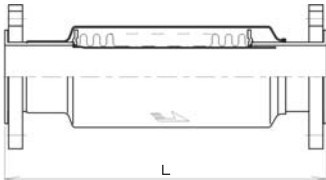
JB-23 Type



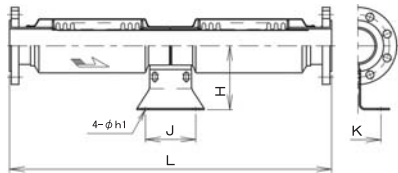
JB-24 Type

CONSTRUCTION

JB-23 Type



JB-24 Type



Note:
 1. Depending on size, the structure may vary.
 2. Size 350mm or larger is available upon your request (for details, please contact our local agent).

FEATURES

- Double-layer bellows with improved durability.
- Except for flange, all parts of bellows are made of stainless steel, and the part contacting with fluid is made of Stainless steel.
- Loose flange for end connection; preventing shifting

- Duplex joint allows adjustment (inching adjustment on height and in forward and backward directions) of the position of installation foot and easier installation (JB-24, size up to 150mm).

SPECIFICATIONS

Model name(Type)	JB-23(Single)	JB-24(Double)
Code name	JB23-N	JB24-N
Applicable fluid	Steam, air, gases, water & oils	
Applicable pressure	Max. 2.0MPa	
Fluid temperature	Max. 250°C	
End connection	Flanged JIS 20K (Loose type)	
Materials	Flange(Mild steel*), External sleeve(Stainless steel), Internal sleeve & Bellows(Stainless steel)	
Pressure test	Hydraulic 3.0MPa	
Expansion amount	35mm	70mm

*JB-23 and JB-24 Type with Stainless steel flange are available upon your request. (Code name:JB23-K, JB24-K Type)

DIMENSIONS JB-23 Type (Single Type)

Size	L	Expansion amount		Mass(kg)
		Expansion	Contraction	
20(¾")	365	10	25	3
25(1")	365	10	25	4
32(1¼")	365	10	25	5
40(1½")	365	10	25	5.5
50(2")	365	10	25	6.5
65(2½")	415	10	25	9
80(3")	415	10	25	12.5
100(4")	415	10	25	16
125(5")	440	10	25	24.5
150(6")	440	10	25	28.5
200(8")	440	10	25	43
250(10")	465	10	25	67
300(12")	465	10	25	130

Flange code JIS 20K (mm)

DIMENSIONS JB-24 Type (Double Type)

Size	L	Expansion amount		H	J	K	h ₁	Mass(kg)
		Expansion	Contraction					
20(¾")	680	20	50	100	100	60	12	4.5
25(1")	680	20	50	100	100	60	12	6
32(1¼")	680	20	50	120	100	70	12	7.5
40(1½")	680	20	50	120	100	70	12	8
50(2")	680	20	50	130	100	80	15	10
65(2½")	780	20	50	140	120	100	15	13.5
80(3")	780	20	50	150	120	110	15	19.5
100(4")	880	20	50	170	120	130	19	25.5
125(5")	880	20	50	200	120	150	19	36.5
150(6")	930	20	50	220	160	180	23	46.5
200(8")	930	20	50	250	160	220	25	70
250(10")	980	20	50	300	180	280	27	102
300(12")	980	20	50	350	200	300	27	200

Flange code JIS 20K

POINTS FOR INSTALLATION

- The arrow mark on the main body should match with the flow of fluid.
- Make sure no torsional stress is applied on bellows.
- Remove set bolt for fixing faces after piping is completed.

AXIAL DIRECTION LOAD ON MAIN FIXING POINT

Items	Size(mm)	20	25	32	40	50	65	80	100	125	150	200	250	300
Bellows' effective area	Ae(mm ²)	650	830	1440	1770	2990	4460	6840	11930	18610	25790	42940	62640	98000
Spring constant	K(N/mm)	50	52	53	53	80	87	155	185	210	290	490	540	700
Load by max. Working pressure at 2.0MPa	Fp(N)	1300	1660	2880	3540	5980	8920	13680	23860	37200	51580	85800	125280	19600
Load by max. contraction at 25mm	Fe(N)	1250	1300	1325	1325	2000	2175	3875	4625	5250	7250	12250	13500	17500
Total load t max. working pressure	Fm=Fp+Fe(N)	2550	2960	4205	4865	7980	11095	17555	28485	42470	58830	98130	138780	213500
Load by hydraulic test pressure at 3.0MPa	(N)	1950	2490	4320	5310	8970	13380	20520	35790	55830	77370	128820	187920	294000